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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,546	01/16/2002	Jerry D. Hayes	BUR920000201	7715

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IBM MICROELECTRONICS  
INTELLECTUAL PROPERTY LAW  
1000 RIVER STREET  
972 E  
ESSEX JUNCTION, VT 05452

EXAMINER	
THOMPSON, ANNETTE M	
ART UNIT	PAPER NUMBER

2825  
DATE MAILED: 02/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	Applicant(s)	
09/683,546	HAYES, JERRY D.	
Examiner	Art Unit	
A. M. Thompson	2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 16 January 2002.  
2a) This action is **FINAL**.      2b) This action is non-final.  
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) Claim(s) \_\_\_\_\_ is/are allowed.  
6) Claim(s) 1-29 is/are rejected.  
7) Claim(s) \_\_\_\_\_ is/are objected to.  
8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
10) The drawing(s) filed on 16 January 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.  
12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.  
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.  
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3.

4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

## DETAILED ACTION

This application 09/683,546, has been examined. Claims 1-29 are pending.

### *Specification*

1. The disclosure is objected to because of the following informalities: At page 1, paragraph 1, the application records a provisional priority date of May 4, 2001.

Appropriate correction is required.

### *Claim Objections*

2. Claims 1-29 are objected to because of the following informalities: Pursuant to claims 1-29, the claim numbering requires Arabic numerals. Additionally, claims 1-29 claim a method, yet the claims also recite the use of a model without establishing its prior existence, thereby creating an antecedent basis problem, e.g. "the model". Pursuant to claim 1, at line 4, insert a comma after "elements". Pursuant to claims 4 and 15, change "such" to - -the- -. Pursuant to claim 19, remove the double period. Pursuant to claim 20, insert a period at the end of the claim. Pursuant to claim 23, use the gerund form of the word pull and delete "acts to". Pursuant to claim 1, before "integrated circuits", insert - -of- -. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claims 1-29** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claims 1, 12, 28, 29 recites the limitation "the model" in line 3. There is insufficient antecedent basis for this limitation in the claim. Other claims referencing "the model" likewise generate an antecedent basis rejection and Applicants are required to correct those claims. Pursuant to claims 2, 13, 28, the limitation "the dc\_base" has insufficient antecedent basis. Pursuant to claims 1 and 12, in the tabulating step, after "driver", insert - -circuit- -.

6. Pursuant to claims 2, 13, and 28, Applicants recite accounting for variations in temperature and supply voltages but fail to specify in what entity this is being done. Additionally, the use of the word "can" in reference to the device DC characteristic implies uncertainty.

7. Claims 3 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are the relationship between characterization and the other claim limitations.

8. Claims 1, 12, 28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships is the relationship between driver circuits and the integrated circuit.

***Allowable Subject Matter***

9. Although the claims contain allowable subject matter, there are replete with objections and rejections under 35 U.S.C. 112, second paragraph, many of which are repetitive. Applicants are encouraged to thoroughly revise all the claims to overcome any outstanding and potential 35 U.S.C. 112, second paragraph issues and all objections. Examiner additionally encourages Applicant to take advantage of the interview process to expedite prosecution of this case.

10. Reasons for the indication of allowable subject matter include: The prior art does not disclose representing switching elements as a voltage controlled resistor by obtaining the product of DC impedance as a function of voltage and a scalar that is a function of time.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892Any inquiry concerning this communication or earlier communications from the Examiner should be directed to A.M. Thompson whose telephone number is (703) 305-7441. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 5:00 p.m.. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (703) 308-1323.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956 or the Customer Service Center whose telephone number is (703)306-3329.

Art Unit: 2825

12. Responses to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

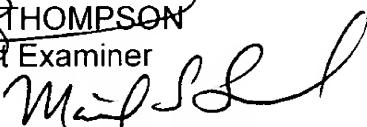
or faxed to:

(703) 872-9318, (for **OFFICIAL** communications intended for entry)

(703)872-9319, (for Official **AFTER-FINAL** communications)

Hand-delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

February 24, 2003

  
A. M. THOMPSON  
Patent Examiner  
  
MATTHEW SMITH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800